



U.S. Department  
of Transportation

400 Seventh Street, S.W.  
Washington, D.C. 20590

**APR 5 2005**

**Pipeline and  
Hazardous Materials  
Safety Administration**

DOT-E 10772  
(FIFTH REVISION)

EXPIRATION DATE: February 28, 2007

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: Air Products and Chemicals, Inc.  
Allentown, PA
2. PURPOSE AND LIMITATIONS:
  - a. This exemption authorizes the manufacture, mark, sale and use of three cargo tank motor vehicles which comply with DOT Specification MC 338 except that each tank has a sump location which does not meet the requirements of § 178.338-4(c). This exemption provides no relief from the Hazardous Materials Regulations (HMR) other than as specifically stated herein.
  - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 172.302(c), 178.338-4(c) in that the tank sump location is not authorized, except as specified herein.
5. BASIS: This exemption is based on the application of Air Products and Chemicals, Inc. dated March 5, 2005, submitted in accordance with § 107.109.

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6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/Hazardous Materials Description	Hazard Class/Division	Identification Number	Packing Group
Hydrogen, refrigerated liquid (cryogenic liquid)	2.1	1966	N/A

7. SAFETY CONTROL MEASURES: Prescribed packagings are three cargo tank motor vehicles, manufactured in accordance with DOT Specification MC 338, except for the location of the sump. In each of the three tanks, a sump has been installed in such a location that it intersects with a longitudinal seam of the inner vessel. This sump location does not comply with § 178.338-4(c). The sump was cut after the longitudinal weld was fully radiographed. All sump welds are fully examined using a liquid penetrant method. Each sump is designed to meet the requirements of ASME Code Section VIII, Division I, which allows the intersection of longitudinal welds with nozzles. The 304N stainless steel used as construction material must have a tensile strength of at least 89,000 psig. Only three cargo tanks are allowed to be manufactured under this exemption; no future construction is permitted.

8. SPECIAL PROVISIONS:

a. In accordance with the provisions of paragraph (b) of § 173.22a, persons may use the packaging authorized by this exemption for the transportation of the hazardous materials specified in paragraph 6, only in conformance with the terms of this exemption.

b. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modification or change is made to the package or its contents and it is offered for transportation in conformance with this exemption and the HMR.

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c. Each packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.

d. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

e. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.

f. Each tank is to be marked with "DOT MC 338 E 10772" on the nameplate as specified in § 178.338-18(a)(1) in lieu of marking the exemption number on the side of each cargo tank. All other markings, tests and inspections must be in accordance with § 178.338.

g. A copy of the final inspection report and hydrostatic or pneumatic test results for each cargo tank must be submitted to the Office of Hazardous Materials Exemptions and Approvals (OHMEA) prior to the first shipment.

9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle.

10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo tank motor vehicle covered by this exemption.

11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation law, 49 U.S.C. 5101 et seq:

- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
- o Persons operating under the terms of this exemption must comply with the security plan requirement in Subpart I of Part 172 of the HMR, when applicable.

- o Registration required by § 107.601 et seq., when applicable.

Each "Hazmat employee", as defined in § 171.8, who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: Shipments or operations conducted under this exemption are subject to the Hazardous Materials Incident Reporting requirements specified in 49 CFR §§ 171.15 - Immediate notice of certain hazardous materials incidents, and 171.16 - Detailed hazardous materials incident reports. In addition, the grantee(s) of this exemption must notify the Associate Administrator for Hazardous Materials Safety -- OHMEA, in writing, of any incident involving a package, shipment or operation conducted under terms of this exemption.

Issued in Washington, D.C.:

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Robert A. McGuire  
Associate Administrator for  
Hazardous Materials Safety

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(DATE)

Address all inquiries to: Associate Administrator for Hazardous Materials Safety, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, Washington, D.C. 20590. Attention: DHM-31.

Copies of this exemption may be obtained by accessing the Hazardous Materials Safety Homepage at <http://hazmat.dot.gov/exemptions> Photo reproductions and legible reductions of this exemption are permitted. Any alteration of this exemption is prohibited.

PO: Olson/sln